Please cite this report as:

Martinez, D., Helsper, D., Casado, M.A., Martinez, G., Larrañaga, N., Garmendia, M., Olveira, R., Salmela-Aro, K., Spurava, G., Hietajärvi, L., Maksniemi, E., Sormanen, N., Tiihonen, S., & Wilska, T.-A., Vissenberg, J., Puusepp, M., Edisherashvili, N., Tomczyk, L., Opozda-Suder, S., Sepielak, D., Pedaste, M., & d'Haenens, L. (2023). *Co-Developing Media Literacy and Digital Skills Interventions: Report on Preliminary Results*. KU Leuven, Leuven: REMEDIS.

Disclaimer

REMEDIS is supported by Research Foundation – Flanders (FWO), Belgium; UK Research and Innovation (UKRI), United Kingdom; Estonian Research Council (ETAg), Estonia; Agencia Estatal de Investigación (AEI), Spain; Academy of Finland (AKA), Finland; and Narodowe Centrum Nauki (NCN), Poland under CHANSE ERA-NET Co-fund programme, which has received funding from the European Union's Horizon 2020 Research and Innovation Programme, under Grant Agreement no 101004509.

Co-Developing Media Literacy and Digital Skills Interventions: Report on Preliminary Results

Work package 2 – Deliverable 2.1

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1 Introduction

1.1 The REMEDIS project

The REMEDIS (Rethinking Media Literacy and Digital Skills) project is funded by the European Union's CHANSE (Collaboration of Humanities and Social Sciences in Europe) programme. The consortium involves 7 academic partners from 6 countries and 14 non-academic cooperation partners. REMEDIS seeks to develop evidence-based approaches to develop and evaluate initiatives that foster media literacy and digital skills (ML&DS) to understand the impacts of ML&DS interventions in different life domains regarding positive outcomes.

REMEDIS adopts an innovative research strategy that first aims to identify and quantify the most salient driving factors for ML&DS from a lifelong perspective and to synthesise the existing evidence concerning the perceived effectiveness of current interventions fostering ML&DS. REMEDIS will pay special attention to target groups, including disadvantaged youths (NEETs or Not in Education or Training), the unemployed, refugees, lower SES people, NEETs carers, and (future) teachers.

The REMEDIS project has four research objectives to achieve its aim.

1. To improve existing theoretical knowledge about the actual outcomes of interventions.
2. To improve and enhance existing ML&DS intervention strategies based on existing and emerging evidence.
3. To adopt advanced methods and to develop and validate instruments for evaluating intervention strategies.
4. To produce evidence-based policy recommendations and develop a user-friendly, customisable evaluation toolkit.

This report contributes to achieving the second objective of REMEDIS by describing the process through which partners co-developed interventions with the researchers on the REMEDIS project based on the work done in Work Package 1 which reviewed the academic literature evaluating ML&DS interventions (See Vissenberg et al., 2023; Martinez et al., 2023).

1.2 Work Package 1: The backdrop to the co-development process (WP2)

The development of a quantitative evidence base through the review of published academic articles (Work Package 1) raised several implications for researchers studying ML&DS and practitioners and interventions.

The review showed that most interventions were based in formal educational settings (schools and universities), aimed at young people in education or their (future) teachers and delivered by education professionals or academic researchers. The outcomes the programmes were trying to achieve were mostly improving educational outcomes, levels of ML&DS in particular.

Therefore, one of the recommendations coming out of the review of the evidence was that interventions needed to have greater diversity: in the groups targeted through interventions (including more vulnerable groups); in the outcomes to target during the intervention and evaluation; and in the locations where these interventions take place (including locations

frequented by target groups). These elements constitute the point of departure for co-developing enhancing actions that aim to increase the positive outcomes of ML&DS interventions.

A further recommendation was to use a theoretical framework to guide intervention design. Approaches that combined educational and media and communications theories that go beyond mere definitions of media and digital skills, were assumed to be most productive.

Another salient factor for successful interventions was the involvement of participants in the intervention design and implementation. That is, rather than considering participants as passive recipients, successful interventions seek participant contribution through idea generation and feedback on how the interventions should take place. In a similar vein, interventions sensitive to participants' specific contexts and characteristics are more likely to succeed. This comprises adapting the content and intervention design to beneficiaries social, economic and cultural conditions, as well as their media literacy and digital skills levels to fit expectations and needs.

The resources available to those delivering and organising the interventions also influence potential impact. For instance, people delivering the interventions should be capacitated to address not only the different challenges regarding ML&DS, but also in understanding participants' socio-economic conditions. Likewise, the involvement of expert academics and practitioners improves the delivery and avoids the repetition of known weaknesses in design and implementation.

The limitations in the digital or technical resources people had access to continues to be a potential barrier even in highly connected societies. They were either not available or not of high enough quality to be able to participate fully in the programmes and hindered participants following up on lessons learned in their own time.

In terms of length, the articles reported found that long-term interventions were more likely to get good results in terms of outcomes achieved (often measured through self-assessment). Furthermore, the integration of theoretical elements and empirical frameworks that link lessons learned from academia and good practices might lead to better results.

1.3 Introduction to this report

The second Work Package of the REMEDIS project focusses on materialising the partnership with local organisations by co-developing opportunities for enhancing current ML&DS interventions. These organisations were carefully selected by each member university to collaborate throughout the project to strengthen links between academia and practitioners and learn from each other.

An initial theoretical framework was proposed, based on the improvement needs identified during the preliminary stages of the Work Package 1 and based on researchers' expertise. This framework served as the basis from which define a more detailed theoretical framework during the co-development with partner organisations.

The next stage in this process was initiating the collaborative work with the partner organisations, understanding their purposes, people involved, resources and expected outcomes to formulate improvement avenues.

The co-development process concludes with the design and planning of the evaluation measurement instruments as part of Work Package 3, adapting questions and formats to the interventions' characteristics.

2 Methodology

This chapter presents two main sections. First, the initial theoretical framework is introduced, explaining their key dimensions and some variables of interest. It must be mentioned that this framework is a work-in-progress, so further modifications are likely according to partners' needs and feedback. The second section accounts for the co-development process, highlighting the expected milestones.

2.1 Definition of the theoretical framework

This section describes the critical elements of a theoretical framework to explore ML&DS interventions. As presented in Figure 1, four general dimensions are included for this purpose: External conditions, organisation and intervention characteristics, digital lived environment and (wellbeing) outcomes.

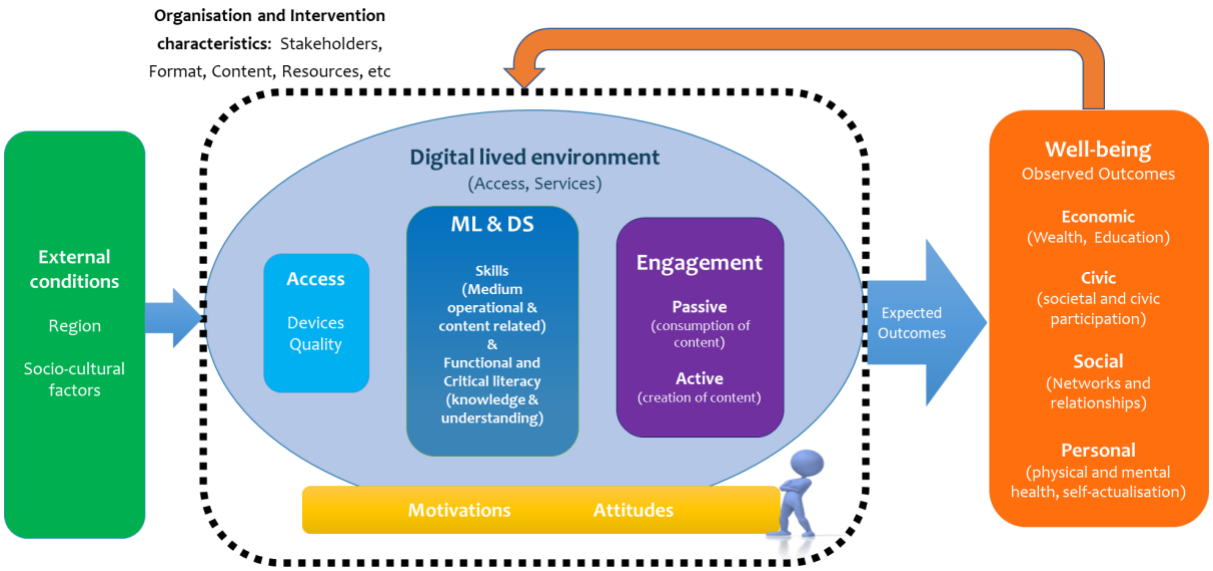

Figure 1. REMEDIS Theoretical Framework

This theoretical framework is subject to further modifications considering partners' feedback, practical possibilities and the possibility of establishing clearer relations between all factors mentioned above. The next sections give an explanation of what the different categories in the model refer to.

2.1.1 External conditions

External factors include both the digital as well as the socio-cultural environment in which the intervention takes place.

Even though Europe is better off when it comes to the diffusion of Internet access and use than other regions (ITU, 2017), not all individuals are equally able to take up the opportunities that come with this connectivity and there are still considerable within country differences. Therefore, this dimension aims to understand what external conditions are relevant to understanding participants, the interventions and their potential outcomes.

Two elements of analysis are proposed in this dimension: geographical region and socio-cultural factors. Geography is usually a good predictor of infrastructure conditions and denotes the relative importance of ICT use and engagement. Individual access conditions and use behaviour should be sensitive to context, and to what extent these conditions are different between beneficiaries and non-beneficiaries and between beneficiaries from different background (Blank & Lutz, 2018; Van Deursen et al., 2017).

Socio-cultural factors, political will, and popular support make up the broader (non-digital) environment in relation to the development and acceptance of media and technologies (Gomez, 2010). In REMEDIS, there was an emphasis on the broader context of discrimination and exclusion that might affect beneficiaries or other people in interventions in particular countries. Examples of these factors are the levels of gender, age, class, religion, or ethnicity-based discrimination and deprivation within a country or neighbourhood.

Since it is important to take context into consideration it is difficult to develop a single set of indicators related to these external factors for every project. The co-development process also involved deciding which factors are relevant to consider according to partners and researchers.

2.1.2 Organisation and intervention characteristics

Apart from the declared purpose of the intervention, some organisational characteristics may explain how the intervention was designed, implemented and what the outcomes were. Hence, this dimension enquires into how organisational resources are used in the running of the intervention. Furthermore, given the particularities of each project, researchers will be able to characterise the intervention and understand the potential limitations during the implementation or data collection.

In broad terms, resources, format, and stakeholders will be used to understand the intervention characteristics. Resources refers to the human (skills) and material (infrastructure, technology) resources that the organisation has, and which are deployed to execute the ML&DS intervention. The intervention format refers to variations in the length, costs, location, content and expected outcomes of the intervention. Under the category of stakeholders, researchers and partners identify individuals and third parties that shape the intervention by funding, designing, delivering, and having influence over the project's implementation or design.

2.1.3 Digital lived environment

The digital lived environment refers to the participants' individual characteristics and the content and resources provided by the intervention. This is important because participants' conditions interact with the intervention characteristics to facilitate or hinder the outcomes of the intervention. The access factor refers to the digital resources available to the individual as well as the quality and types of devices that the interventions work with and provide.

The media literacy and digital skills of the person participating in the intervention and the material provided to acquire these were classified according to robust and existing academic theorisations. Arshad et al. (2022) 's three-factor media literacy model (Educating about role of media, Representation in media, Cultural context of media) was used to think through media literacy and digital skills were conceptualised based on Helsper et al.'s framework (in Smahel et al., 2023) (including the four dimensions of digital skills and knowledge Technical and Operational, Information navigation and processing, Communication and Interaction, Content creation and production).

Engagement was conceptualised in terms of the types of activities and services that interventions provide and that participants engage with in mediated and digital environments. This can be passive, consumption of existing content based or more active in the sense of shaping these environments through creative or interactive processes.

The final part of the digital lived environment are the motivations and attitudes that predict the impact of the ML&DS interventions both in terms of the attitudes that participants bring with them about the digital world and their place in it as well as the types of motivations and perceptions of the digital world that interventions teach or implicitly broadcast (Blank & Lutz, 2018; Helsper & Reisdorf, 2017).

2.1.4 Outcomes

Outcomes comprise all the different types of impacts the intervention achieves (Social Impact Toolbox, 2020). Some of these are designed into or brought to the interventions as expectations by beneficiaries, stakeholders and practitioners, others are unexpected. The way in which the negotiations take place around what expected outcomes should be is also of interest in the co-development process, exploring how different actors participated in the design and implementation of interventions. For example, questions were asked about if outcomes were negotiated between the delivery organisation and the participants, and how this influenced the observed final outcomes (Hatakka & Lagsten, 2012). Such outcomes were framed around categories suggested by (Helsper, 2017) in her resource model based on Bourdieusian capital models: Economic (e.g. learning, education, finances, employment), Civic (e.g. empowerment, belonging, identity), Social (e.g. informal and formal relationships) and Personal (e.g self-actualisation, physical and mental health) wellbeing.

Furthermore, the co-development explored whether interventions considered confronting and creating resilience against harmful or negative experiences online and not just the achievement of positive outcomes (Blank & Lutz, 2018; Helsper, 2021).

In sum, the framework aided an exploration around how partners, given their organisational structure and resources, might design interventions that help participants develop media literacy and digital skills that result in positive tangible outcomes (expected or unexpected).

2.2 Co-development

The core of this Work Package consists of the co-development sessions to reflect on how interventions are implemented and what improvement opportunities are found to maximise the social benefits for participants. Co-development is understood as a collaborative and horizontal relationship between researchers and practitioners to transform ML&DS interventions and evaluation based on research evidence. Hence, it is expected to go beyond co-design and commit to achieving agreed changes in implementation (Beetson et al., 2020; Van der Graaf & Veeckman, 2014).

Four general objectives are proposed for the co-development sessions:

- Introduction of the research objectives: The theoretical framework and partial findings derived from a review of the academic literature (WP1) are used to encourage the discussion of how researchers and partners could mutually benefit and learn from each other.
- Selection of specific activities/projects: Given that partner organisations may run different interventions during the time of the project, specific projects and activities around which the research will be conducted need to be defined. Some factors that were considered were the partners' needs to improve specific activities, data availability, or to what extent these interventions aim to contribute to participants' wellbeing.
- Changes in design: Based on a thorough review of the interventions, some potential changes are proposed by the partners based on the discussions facilitated by the REMEDIS researchers. These changes take into consideration the resources and capabilities of all actors involved in the interventions to determine feasibility, relevance, and urgency.
- Development implementation plan: Although some changes can be immediately implemented (e.g., changing slides in a presentation), other changes may require more effort and the inclusion of third parties (e.g., creating material in other languages). Therefore, short-term changes are implemented before the start of the (next round of the interventions) and action plans for long-term changes are drafted.

Given that partner organisations and universities present different work patterns and expectations, researchers are flexible in terms of how these tasks are brought into practice. To facilitate this a visual guide was prepared as a tool to structure the discussion using some leading questions following the theoretical framework general dimensions (Figure 2).

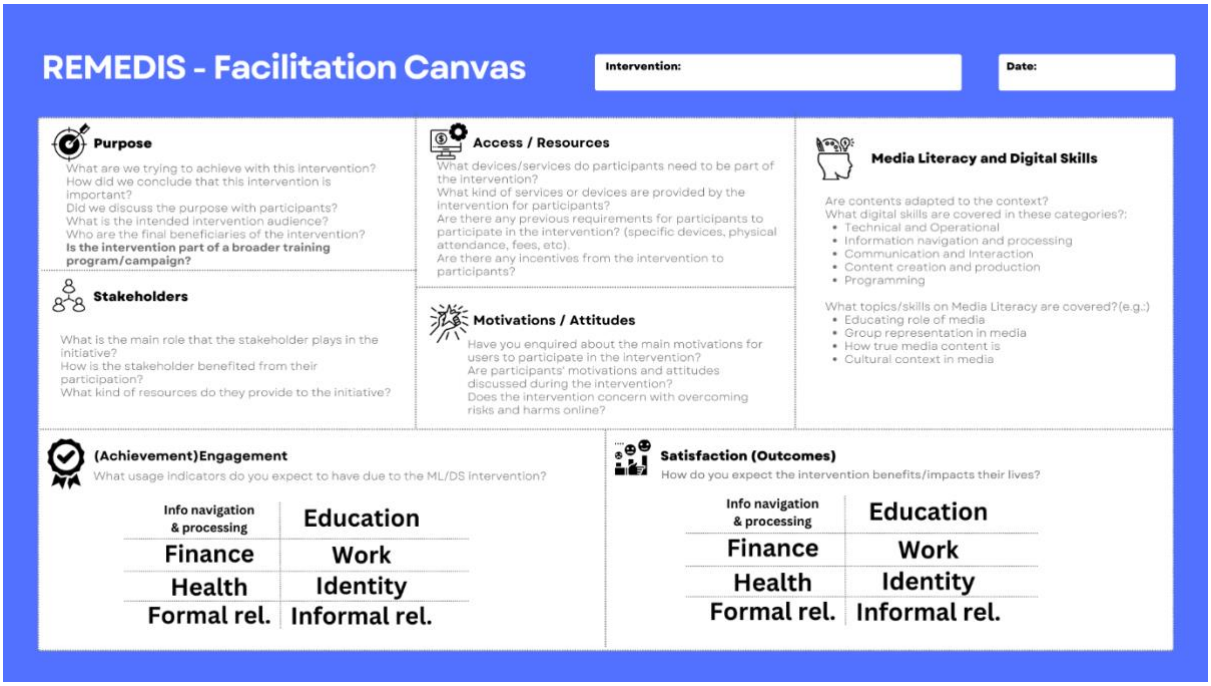

Figure 2 Visual guide used for Co-Development

The visual guide was used in the first meetings after selection of the projects to scope the intervention in terms of what the programme already did and what had not been considered or where there was room for improvement. In follow-up meetings the visual guide was used structure the discussions around the evaluation instrument which was being developed in parallel between REMEDIS researchers and in discussions with the partner organisations.

2.2.1 Evaluation design

The design of the evaluation instruments took place in parallel to the co-development process. Provided that all interventions vary in format and length and in terms of target groups the measurement instrument was designed flexible in the way it can be applied. The planning of the evaluation along with the partners was an important part of this, this included figuring out data collection times, dates and data management according to the partner organisations policies and following the REMEDIS project ethical guidelines.

3 Results

In this section, the results obtained to date (November 2023) are presented[1]. A brief characterisation of the interventions is presented in section 3.1 and a summary of the preliminary results of the co-development can be found in section 3.2.

3.1 Partners

Each university that was part of the consortium was responsible for finding local organisations working on ML&DS and for establishing partnerships for the duration of the project. Some of them are based on previous collaborations with research teams, while in other cases, this was the first time that contact was made. In some cases, other organisations were initially invited to participate, but no agreements were reached.

To date, 14 interventions are established to partner in the REMEDIS project. Their names, country and intended beneficiaries are presented in Table 1.

Table 1. Partner organisations and interventions overview

Name	Country	Beneficiaries
Alle ouders digitaal vaardig ("All parents digitally skilled")	Belgium	Families (including those from disadvantaged socio-economic and a variety of socio-cultural backgrounds)
Veilig Online	Belgium	(Families) Parents/Carers (including those from disadvantaged socio-economic and a variety of socio-cultural backgrounds)
Pretchat	Belgium	(Families) Parents/Carers (including those from disadvantaged socio-economic and a variety of socio-cultural backgrounds)
Teacher Digital Competence Course	Estonia	Teachers

[1] Since several obstacles were encountered and timing of interventions was not controlled by the researchers this is still work in progress for many of the interventions, the co-development process should be completed by the end of 2023.

Opiq (Star Cloud)	Estonia	Teachers, pupils, school administrators and private users
Familiarizing oneself with the digital services of the wellbeing services county	Finland	Elderly people
The Finnish Society on Media Education	Finland	Vocational school students (including more disadvantaged young people)
Gaptain	Spain	Secondary school children, teachers and families
Pantallas Amigas - Cibermanagers	Spain	Secondary school children and their families
The Good Things Foundation	UK	Socially excluded people (82%), including low SES.
Citizens Online	UK	Low SES, Unemployed
Code Your Future	UK	Low SES, Refugees and asylum seekers
Digital Unite	UK	Low SES
Strengthening media skills among educators and carers	Poland	(Pre-service) teachers and professional care providers

The co-development process is still under way, an overview of the partners and the work they do in each country is presented below.

3.1.1 Belgium

The Belgian team has focused on the work with families including those from disadvantaged socio-economic and a variety of socio-cultural backgrounds. Bearing this in mind, they established partnership with *AODV, Veilig Online* and *Pretchat. Alle ouders digitaal vaardig ("All*

parents digitally skilled") is designed to assist parents with limited digital skills. Its primary objective is to impart practical skills that can be applied in their day-to-day lives. The overarching goal of the intervention is to empower these parents by giving them the confidence to seek assistance when required and providing them with valuable information on reliable sources of support. AODV is run by Gezinsbond, an organisation aimed at providing support to families.

Veilig Online develops in-person workshops to reflect on any of the 6 main topics (Digital toddlers and pre-school children, Social Media, Internet and Privacy, Gaming, Cyberbullying, and Online relations and sexuality), improving communication skills between children and parents regarding these topics. The provider is Child Focus and Kind en Gezin, funded by the Ministry of Education.

Pretchat is an online game aimed at talking within the family about positive and negative things related to the children's internet use, developing information searching skills and reflecting on media use and screen time. It is part of Mediawijs, an institution funded in 2013 by the Flemish government.

3.1.2 Estonia

The Estonian team's primary target group has been teachers who will go on to teach or are already teaching young people from a variety of backgrounds including more disadvantaged pupils. As a result, The Teacher Digital Competence Course and *Opiq (Star Cloud)* were selected as the partner interventions. The Teacher Digital Competence Course is an online course run on Moodle (along some webinars) aimed at increasing competence and confidence using technologies for teaching. It is expected that teachers will increase their self-efficacy and reduce their anxiety around using digital technologies. Ultimately, the objective is that this intervention indirectly increases students' competences. The provider is the Education and Youth Board, which is a government agency of the Ministry of Education and Research.

Opiq (Star Cloud) is a software company delivering some seminars to improve teachers' motivation, self-efficacy, and reduce their anxiety around using Internet. They develop different education resources for its use in school environments. Founded in 2014, Star Cloud's funds come from licence fees.

3.1.3 Finland

The Finnish team consists of two universities, each in charge of one specific intervention. The first one is the course "Familiarizing oneself with the digital services of the wellbeing services county" is part of a project "Significance of digital support for older adults using digital technologies and services in the wellbeing services county of Central Finland" led by The Centre of Excellence of Ageing and Care (CoE AgeCare) at the University of Jyväskylä, Finland. This is a one-off intervention with an estimate of 5.5h run in two different cohorts aimed at elderly people.

The second intervention is The Finnish Society on Media Education, aimed at vocational school students, including young people from socio-economically disadvantaged and other diverse

backgrounds. The intervention is run during the Autumn of 2023 and will consist of in-person workshops, funded by the Finnish National Agency for Education's Reading Movement program. Their objective is to increase participants' wellbeing through better multiliteracy skills, including reading, writing and critical skills.

3.1.4 Poland

The intervention "Strengthening media skills among educators and carers" is led by the Jagiellonian University and aims to strengthen media skills in assessing the reliability of information. Based on the DigComp 2.2 framework (Vuorikari et al., 2022), the 10-15h in person training programme expects to strengthen information navigation and processing skills and media competences for future pedagogy and care professionals.

3.1.5 Spain

Gaptain and *Pantallas amigas* are the two partner organisations working with the Spanish team. *Gaptain* is a private organisation whose main client is the government and thus has national reach, including people from disadvantaged backgrounds. They are currently developing a blended learning program for teachers, adolescents and other school personnel working on children's resilience, cybersecurity and privacy skills levels, thus improving their digital wellbeing. Funds for this project come from the Spanish Ministry of Social Rights and Agenda 2030 + EU.

Pantallas amigas (cibermanagers) is a blended course aimed at secondary school children and aims to contribute for a safe and healthy use of the Internet by developing critical thinking skills, empathy, emotion management, and digital knowledge. Pantallas Amigas is a non-profit founded in 2004 to work with public administrations and schools to provide training and content on digital skills.

3.1.6 United Kingdom

Four different organisations agreed to collaborate with the team in the UK, most of them working with people from lower Socio-Economic Status (SES) backgrounds, namely *Citizens Online, Code Your Future, Good Things Foundation* and *Digital Unite*. *Citizens Online* is a charity which supports digitally excluded people via a telephone line and trains digital champions for one-to-one support. The Digital Gwynedd project in Wales was selected for the REMEDIS. This initiative is run in North Wales aimed to enhance job seeking skills online. Founded in 2000, they have developed similar projects across the UK, often providing services to public bodies.

Code Your Future is a non-profit organization that runs digital literacy training courses for people with low SES, prioritizing refugees and asylum seekers. The digital literacy program is three weeks long and started in 2022. The organization started in 2016 to train refugees, asylum seekers and other socially vulnerable individuals to become software developers and find a job in the tech industry. It is funded by donations of private companies and grants.

The Good Things Foundation is an organization that works to improve digital access and skills to socially excluded people in the UK. They provide data, mobile devices and online courses for people with limited access to Internet. In addition, they administer the National Digital Inclusion Network where more than 1400 organisations connect to contribute to bridge access

gaps. It started in 2009 as UK Online Centres and receives funding from different donors and grants such as the NHS, The Lottery Fund or the Barclays Bank.

Lastly, *Digital Unite* that aims at bridging the digital divide, especially for older adults that lack adequate digital skills to access different services and opportunities online. It was founded in the 1990's and focuses on training digital champions in companies or as volunteers to support vulnerable adults online.

3.2 Co-development work

The research teams started the co-development activities with their local partners in May 2023. In some cases, these meetings required preliminary work on negotiating the scope of the research and expected commitments, whereas other partnerships relied on previous work and demanded less effort in launching collaborative work.

3.2.1 Interim results of co-development

During the first six months relationships between researchers and partner organisations evolved, resulting in several lessons learned. Even though the co-development process is still work in progress and some of the proposed actions and their planning still need to be assessed in terms of feasibility, improvement opportunities materialised and these are described in the sections that follow.

3.2.1.1 Adapting delivery

When reviewing how the interventions are delivered, some challenging parts for participants were found. During the co-development sessions, researchers and partners have identified ways to make parts easier to understand and participate in taking into consideration the characteristics of the groups they are working with in ways they had not before, changing the order of implementation or using additional material to enhance their practice. For example, either underestimating or overestimating the range of skills that the participants might have when looking at the frameworks provided by REMEDIS led to adjustments of materials either increasing breadth or providing more specific and in instances basic training content, also incorporating this into evaluation. These could be based on a discussion around the digital material resources that people (do not) have access to or to realising that there were language and cultural barriers to grasping some of the material provided as part of the intervention.

3.2.1.2 Aligning delivery and expected outcomes

Most of the partner organisations are funded by third parties, meaning they have to demonstrate that resources are efficiently and appropriately administered. In addition, due to time and resource pressures, interventions have had to focus on delivering according to plan, with little time to pause, evaluate and reflect, this resulted in their attention being on the day-to-day running of the programme and overall objectives being pushed to the background. The time and effort spend on ensuring that all procedures and good practices are followed, can hinder the realisation of an intervention's social value contributions.

For many partners, the co-development sessions were an opportunity to look back on the whole processes and reflect on how the intervention as implemented responds to their

beneficiaries' needs and the goals they set as an organisation. During this process, partners have realised that their contribution might be different from what was initially envisioned, so some contents and activities may not be appropriate anymore. For example, they might have initially thought their main contribution was 'upskilling' individuals to have better opportunities in the labour market but then realising that the actual value of the intervention was empowering individuals more broadly to gain a sense of confidence in their ability to navigate, be resilient in and contribute to the changing world. This meant confidence building and critical knowledge generation was given greater emphasis on this in the delivery of the intervention and the evaluation of its success.

3.2.1.3 Improving evaluation.

Co-development sessions have found that design and evaluation processes have not been designed according to the intervention's specific characteristics, objectives and desired outcomes. The instruments deployed for evaluation are often surveys of which the answers to question remain un(der)used. The co-development has also made clear that other key aspects are not evaluated and should be included in the future to understand how the intervention contributes to the goals set by the organisations and the participants. Categorising questions drawing on specific theoretical frameworks, as suggested by the review of the academic literature on effectiveness of interventions, was part of the co-development process using the visual guide (figure 2) and should help organisations structure their design, implementation and evaluation around how their Media Literacies and Digital Skills training can lead to a variety of wellbeing outcomes.

In parallel, a questionnaire for the evaluation process was developed through extensive discussions between REMEDIS partners and was subject to thorough review by partner organisations. This provided valuable inputs in improving clarity, accuracy and improved understanding of the limitations to its applicability in practice.

3.2.1.4 Awareness of stakeholders' importance

When discussing the role of stakeholders it became apparent that the role volunteers, intermediaries and even funders is underestimated in the facilitation of an intervention's successful outcome. Their visibility and voice is limited to the formal description of their role in documents without much time for evaluation or discussion around these during the design and running of the intervention, obscuring their importance in terms of shaping day-to-day practices and experiences of the beneficiaries. By making their importance explicit during the co-development discussions, partner organisations found ways to improve interventions by, for example, giving the organisers more agency, allowing for the provision of better training, or identifying roles to be filled when it became clear that there were gaps in provision of delivery (directly in terms of intervention delivery on the ground but also in administration and management). This resulted in former beneficiaries becoming volunteers or staff members, after the acknowledgement of their experience and importance in making an intervention a success. Thinking of stakeholders outside the organisation, helped in signposting other interventions, services, and content facilitating the continuation of the learning process for beneficiaries.

3.2.2 Logistics of evaluation and resource limitations

One of the most important limitations raised during this process is the constraints presented to build in the time and generate the resources to do evaluation in ways that makes these comparable between different interventions and integrate the theoretical knowledge as presented in the visual guide and the evaluation survey instrument.

Since some interventions are one-off sessions, time available with participants is very short and valuable and should concentrate on delivery of the content and material of the intervention itself. Even in interventions with more sessions drop out can be significant with little opportunity to follow up (especially the case with online, voluntary courses). Long data collection instruments would be detrimental to delivery. Another issue was that putting a pre-survey is done this could put beneficiaries off participating at all in the end. Having a longer survey at the end looking back at things learned can also be quite taxing for respondents who come from more disadvantaged backgrounds who have just gone through a training session (for example, the elderly). Comprehensive instruments that cover all aspects of the model presented in figure 1 would be highly beneficial for interventions but are unrealistic in practice since they would take at least 30 minutes to implement. For that reason, the aim is to ensure that each pre- and post-questionnaire will take no more than 10 minutes to administer. An additional complication was that many organisations already have their own measurement instrument in place and that the core questions co-developed as part of the REMEDIS project would have to be integrated or reconciled with those. It was left up to the partners to decide, if conditions permit, on adding other questions from a series of those suggested by the REMEDIS researchers.

Several partners raised concerns about the potential response rate, especially when they have no direct contact with participants. Some feared that response rates could be as low as 5%, with even lower percentages for follow-up surveys.

An important part of the co-development process was the adaptation and discussions around relevant indispensable (core), interesting, and 'nice to have' questions in the survey evaluation instrument. Considering the logistical limitations identified above, REMEDIS researchers took a flexible approach, prioritising implementation over strict criteria in relation to construct validity and statistical comparability between partner projects.

4 Concluding remarks and outstanding work

The aim of this Work Package is the establishment of a co-development process with ML&DS interventions that improve participants' well-being in economic, social, or personal terms. This work is underpinned by the findings from the review of the academic literature conducted (WP1 – D1.1 and D1.2) and the elaboration of a theoretical framework as a basis for discussion with intervention partners. The model proposes that the outcomes of interventions are shaped by factors external the intervention and by participants' digital lived environment, understood as the beneficiaries' access, skills, engagement and attitudes towards media and digital environments as well as how these same the resources are part of the intervention.

Accordingly, this report presents the theoretical framework that explicitly includes external (e.g. national, regional characteristics) and organisational factors alongside the characteristics of the beneficiaries and the intervention itself. This came up as essential to understanding the relative success of interventions in the literature review, and was a gap in previous work which mostly evaluated intervention contents and formats of delivery.

The co-development process aimed to go beyond the co-design of interventions and greater, more informed involvement from researchers in assisting practitioners in the implementation of changes. REMEDIS also set out to involve stakeholders in the definition and design of evaluation instruments in ways that can contribute to improved decision-making following REMEDIS research objectives.

So far, 14 different organisations have joined the REMEDIS project in six different countries. They use different intervention formats in order to benefit diverse populations, such as students from different backgrounds, teachers, vulnerable families, jobseekers and refugees. The results showed that the co-development was an important moment for reflexion space for which is not often created in the day-to-day rush of implementation of ML&DS interventions. This process gave partners the opportunity to make changes to current delivery materials, improving evaluation instruments, reflect on the role of stakeholders and to think through the alignment between the delivered and the expected outcomes and adjusting an understanding of the goals and instruments used in the interventions.

Limitations to evaluation and implementation are mostly related to scarce resources, time being one of the most valuable resources for interventions and the participants in them. Making it hard to do proper comprehensive, comparable evaluations using a pre- and post-design hoped for as best practice.

WP2 is a work in progress, the research partners have already had sessions but further iterations with partners are still pending to find improvement opportunities, assessing feasibility of evaluation and implementation in the period that the evaluation phase is planned for the REMEDIS project. Most partners have already identified improvement opportunities, but in most cases, these changes must be reviewed by other members of the organisation or boards. Moreover, some of these improvements are subject to availability of adequate resources and may not be implemented immediately. For instance, projects that were signed with third parties may need to be revised with them in light of any contractual changes or

being postponed for future iterations. Additionally, some project might not start implementation until further in the year 2024.

In that sense, it is expected that the co-development takes place until the first half of 2024 when all partner organisations are able to start the WP3 which is the evaluation part of the project..

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